

CLAIMS

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1. A telephone network for a structured site, essentially of a business office type, comprising a local computer network connecting computers at the transmitting and receiving ends of the system through network adapters, and telephone sets connected to said network to provide telephone communication between the parties at the transmitting and receiving ends through said local computer network, wherein it is provided with a computer telephony server connected to the local computer network and to a general telephone network, with telephone adapters according to the number of telephone sets, each telephone set being connected, directly through a telephone adapter and a network adapter connected in series thereto, to the local computer network, the telephone adapter being capable of converting analog/digital signals adapted to the clock frequency of the local network, user call signals into addresses of other telephone adapters connected to said local computer network, and hang-up signals.

2. A network as claimed in claim 1, wherein at least some of the computers connected to said network are provided with multimedia software to allow direct voice telephone communication

3. A network as claimed in claim 1, wherein a telephone adapter has a transmission channel and reception channels, the transmission channel having a signal detector-distributor with an input connected to a telephone set, a first output of said signal detector-distributor being connected to the input of a tone dialing recognition device having its output connected to the input of a recognized number transmission device, which has its output connected through the network adapter to the local computer network, a second output of the signal detector-distributor being connected to the input of an analog-to-digital converter having its output connected to the input of a compressor whose output is connected to a processor unit having software to allow exchange of digital data to be effected within the framework of common network protocols, and the reception channel having a voice and tone signal transmission priority device having its output connected to the telephone set and a first input connected to the output of a call signal dialer, whose input is connected to a call number data converter having its input connected to the local computer network through said network adapter, a second input of the voice and tone signal transmission priority device being connected to the output of a voice signal transmitter, whose input is connected to the output of a decompressor having

its input connected to said processor unit.

4. A network as claimed in claim 3, wherein said processor unit comprises a central processor connected to digital data input-output devices and to a stored-program memory and a random access memory to allow exchange of digital data to be effected within the framework of common network protocols.

5. A system to maintain telephone communication between remote structured sites, comprising, at a first site, an internal telephone network including a local computer network to connect computers at the transmitting and receiving ends of the system through network adapters, and telephone sets connected to said network to provide telephone communication between parties at the transmitting and receiving ends through said local computer network, wherein it is provided, at the first site, with a computer telephony server connected to the local computer network of said site and to the general telephone network in the area of said site, and with telephone adapters according to the number of telephone sets, each telephone set being directly connected, through a telephone adapter and the network adapter connected in series thereto, to the local computer network, the telephone adapter being capable of converting analog/digital signals adapted to the clock frequency of the local network, user call signals into the addresses of other telephone adapters connected to said local computer network, and hang-up signals, each successive site having an internal telephone network duplicating the telephone network of the first site, the local computer network of each site being provided with a router connected thereto and to a router of the local computer network of at least one other site through a communication channel of the computer networks of the remote structured sites.

6. A system as claimed in claim 5, wherein at least some of the computers connected to said network are provided with multimedia software to allow direct voice telephone communication.

7. A system as claimed in claim 5, wherein the telephone adapter has a transmission channel and reception channels, the transmission channel having a signal detector-distributor connected to the input of the telephone set and a first output connected to the input of a tone dialing recognition device, whose output is connected to the input of a recognized number transmission device having its output connected through the network adapter to the local computer network, a second output of the signal detector-

distributor being connected to the input of an analog-to-digital converter having its output connected to the input of a compressor whose output is connected to a processor unit provided with software to allow exchange of digital data to be effected within the framework of common network protocols, and the reception channel having a voice and tone signal transmission priority device having its output connected to the telephone set and a first input connected to the output of a call signal dialer, which has its input connected to a call number data converter having its input connected through said network adapter to the local computer network, a second input of the voice and tone signal transmission priority device being connected to the output of a voice signal transmitter having its input connected to the output of a digital-to-analog converter having its input connected to the output of a decompressor, whose output is connected to said processor unit.

8. A system as claimed in claim 7, wherein said processor unit is a central processor connected to a digital data input-output device and to a stored-program memory and to a random access memory to allow exchange of digital data within the framework of common network protocols.

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